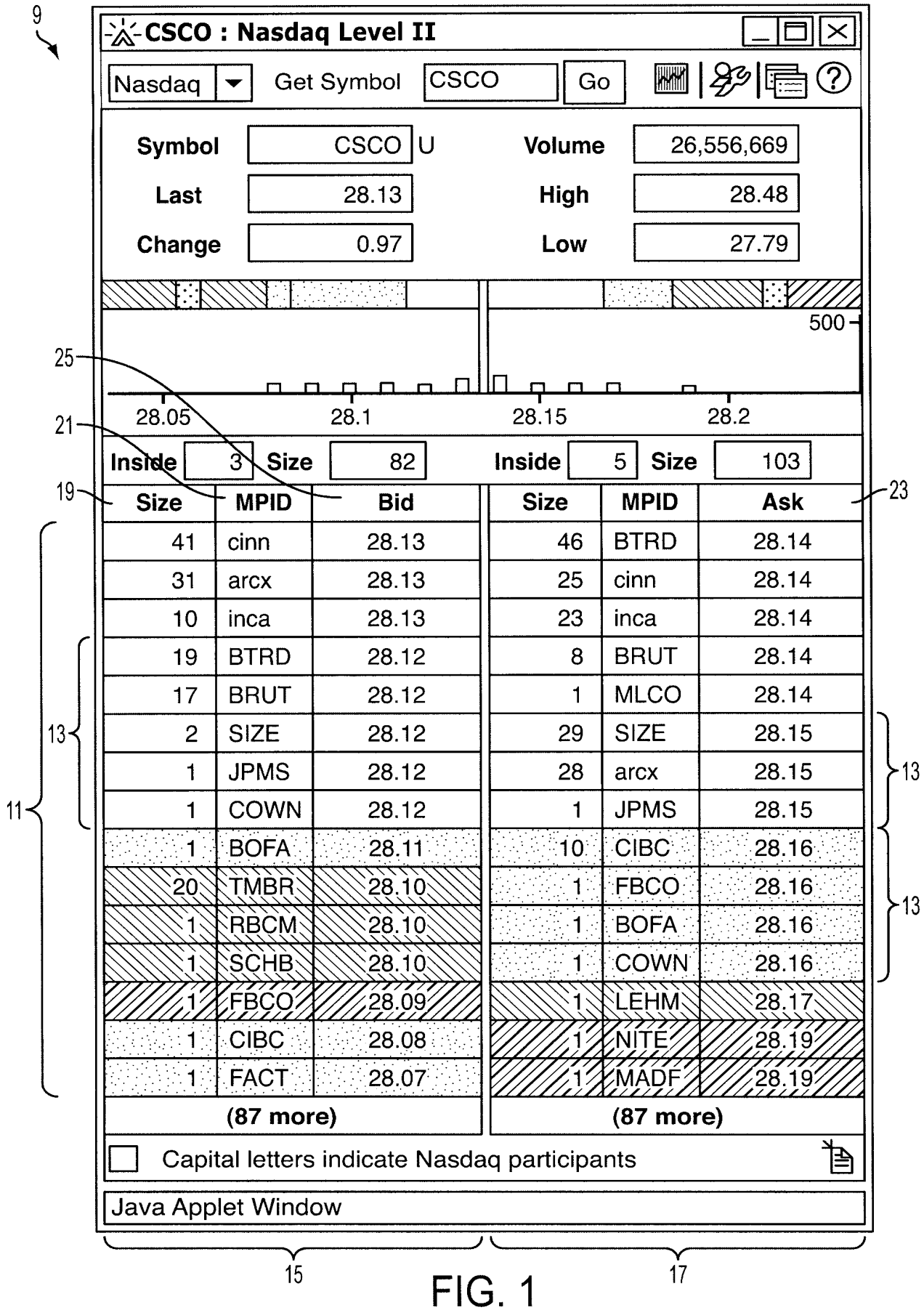
9
CSCO : Nasdaq Level II
Nasdaq
Get Symbol
CSCO
Go
Symbol
CSCO
U
Volume
26,556,669
Last
28.13
High
28.48
Change
0.97
Low
27.79
500
25
28.05
28.1
28.15
28.2
21
Inside
3
Size
82
Inside
5
Size
103
19
Size
MPID
Bid
Size
MPID
Ask
23
41 cinn 28.13 46 BTRD 28.14
31 arcx 28.13 25 cinn 28.14
10 inca 28.13 23 inca 28.14
19 BTRD 28.12 8 BRUT 28.14
17 BRUT 28.12 1 MLCO 28.14
2 SIZE 28.12 29 SIZE 28.15
1 JPMS 28.12 28 arcx 28.15
1 COWN 28.12 1 JPMS 28.15
1 BOFA 28.11 10 CIBC 28.16
20 TMBR 28.10 1 FBCO 28.16
1 RBCM 28.10 1 BOFA 28.16
1 SCHB 28.10 1 COWN 28.16
1 FBCO 28.09 1 LEHM 28.17
1 CIBC 28.08 1 NITE 28.19
1 FACT 28.07 1 MADF 28.19
(87 more)
(87 more)
Capital letters indicate Nasdaq participants
Java Applet Window
11
13
13
13
15
17

FIG. 1

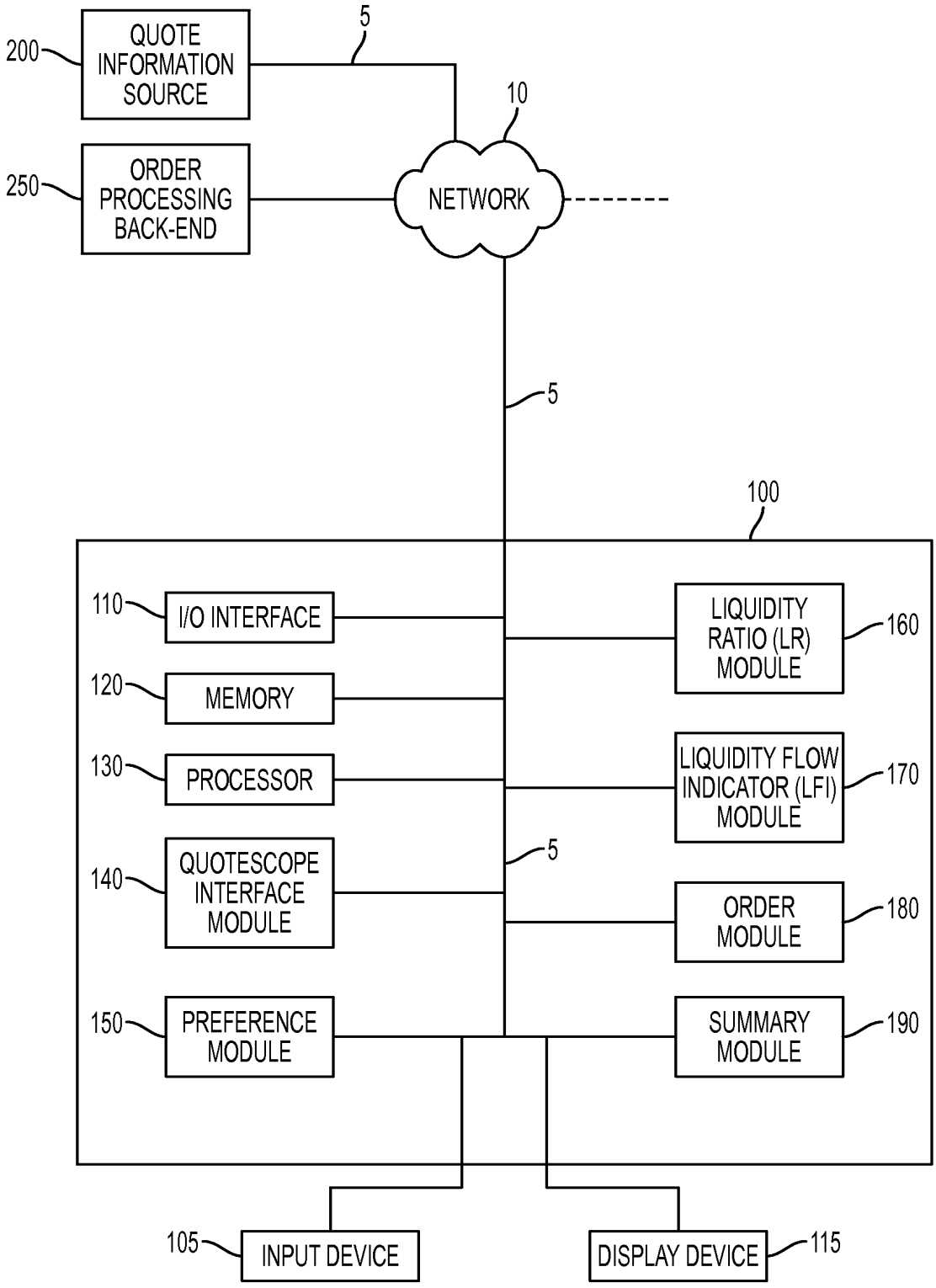
200
QUOTE INFORMATION SOURCE
5
10
250
ORDER PROCESSING BACK-END
NETWORK
5
100
110
I/O INTERFACE
120
MEMORY
130
PROCESSOR
140
QUOTESCOPE INTERFACE MODULE
150
PREFERENCE MODULE
LIQUIDITY RATIO (LR) MODULE
160
LIQUIDITY FLOW INDICATOR (LFI) MODULE
170
5
ORDER MODULE
180
SUMMARY MODULE
190
105
INPUT DEVICE
DISPLAY DEVICE
115

FIG. 2

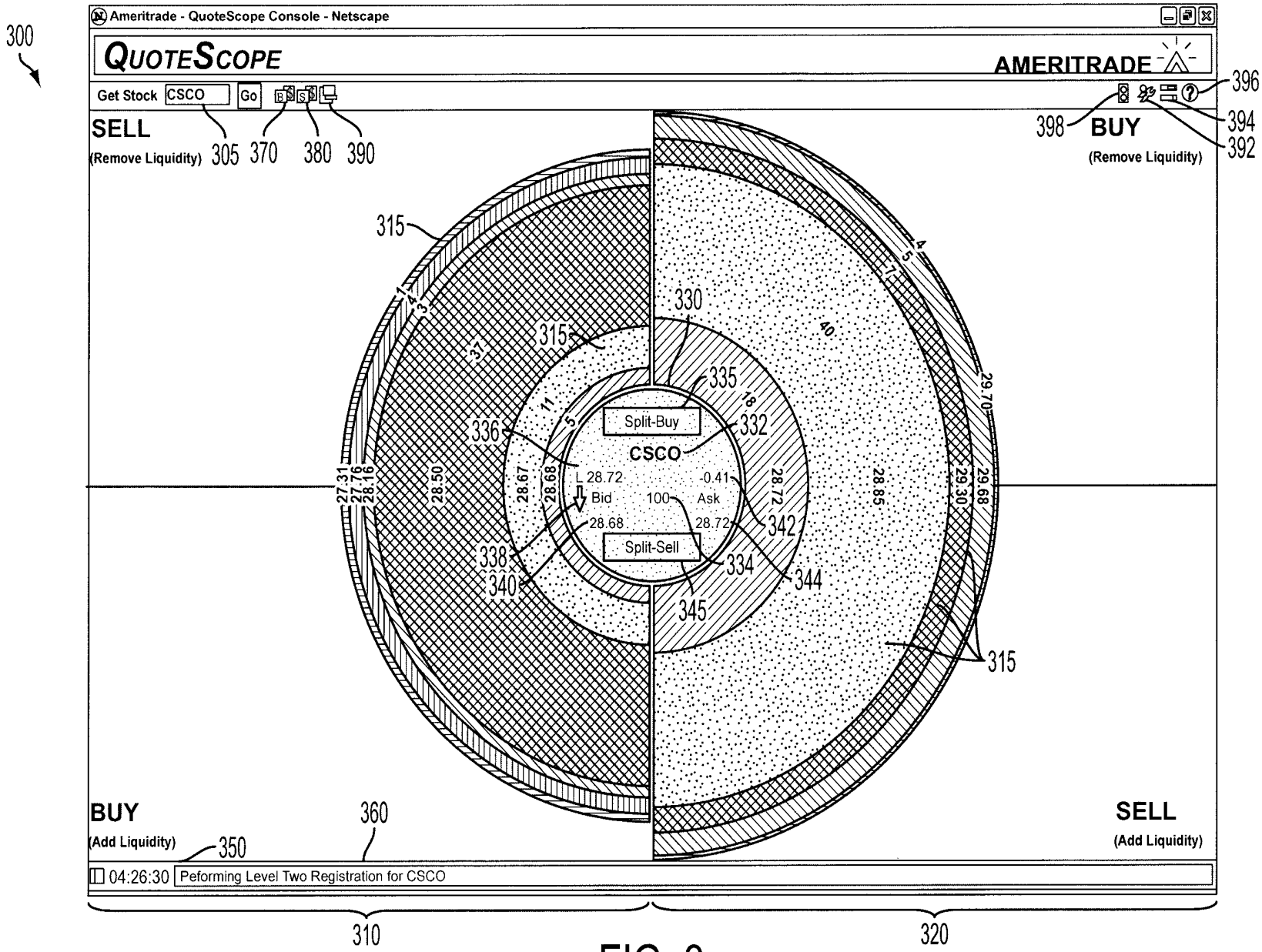
300
Ameritrade - QuoteScope Console - Netscape
QUOTESCOPE
AMERITRADE
Get Stock
CSCO
Go
SELL
(Remove Liquidity)
305
370
380
390
396
394
392
398
BUY
(Remove Liquidity)
315
330
335
332
336
Split-Buy
CSCO
L 28.72
-0.41
Bid
100
Ask
28.68
28.72
Split-Sell
338
340
334
342
344
345
BUY
(Add Liquidity)
350
360
SELL
(Add Liquidity)
04:26:30
Peforming Level Two Registration for CSCO
310
320

FIG. 3

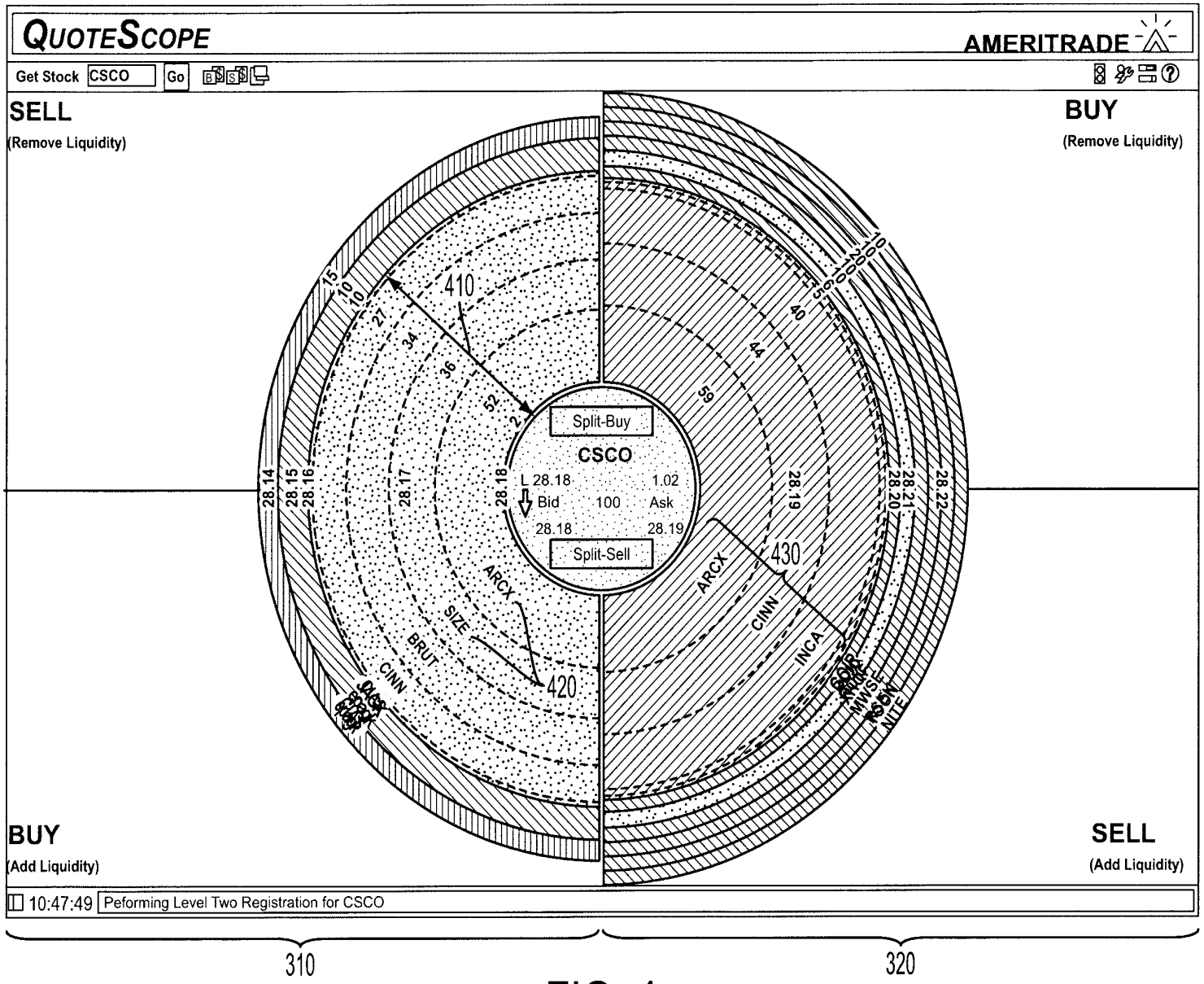
400
QUOTESCOPE
AMERITRADE
Get Stock
CSCO
Go
SELL
(Remove Liquidity)
BUY
(Remove Liquidity)
410
Split-Buy
CSCO
L 28.18
1.02
Bid
100
Ask
28.18
28.19
Split-Sell
420
430
ARCX
SIZE
BRUT
CINN
INCA
NITE
BUY
(Add Liquidity)
SELL
(Add Liquidity)
10:47:49
Peforming Level Two Registration for CSCO
310
320

FIG. 4

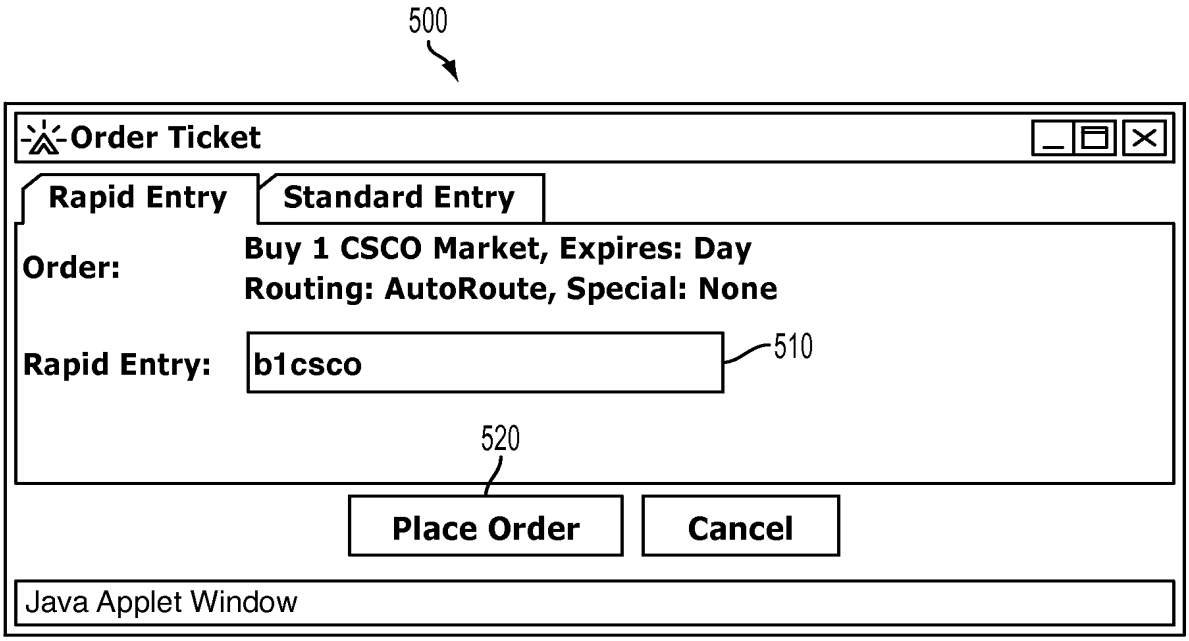
500
Order Ticket
Rapid Entry
Standard Entry
Order:
Buy 1 CSCO Market, Expires: Day
Routing: AutoRoute, Special: None
Rapid Entry:
b1csco
510
520
Place Order
Cancel
Java Applet Window

FIG. 5

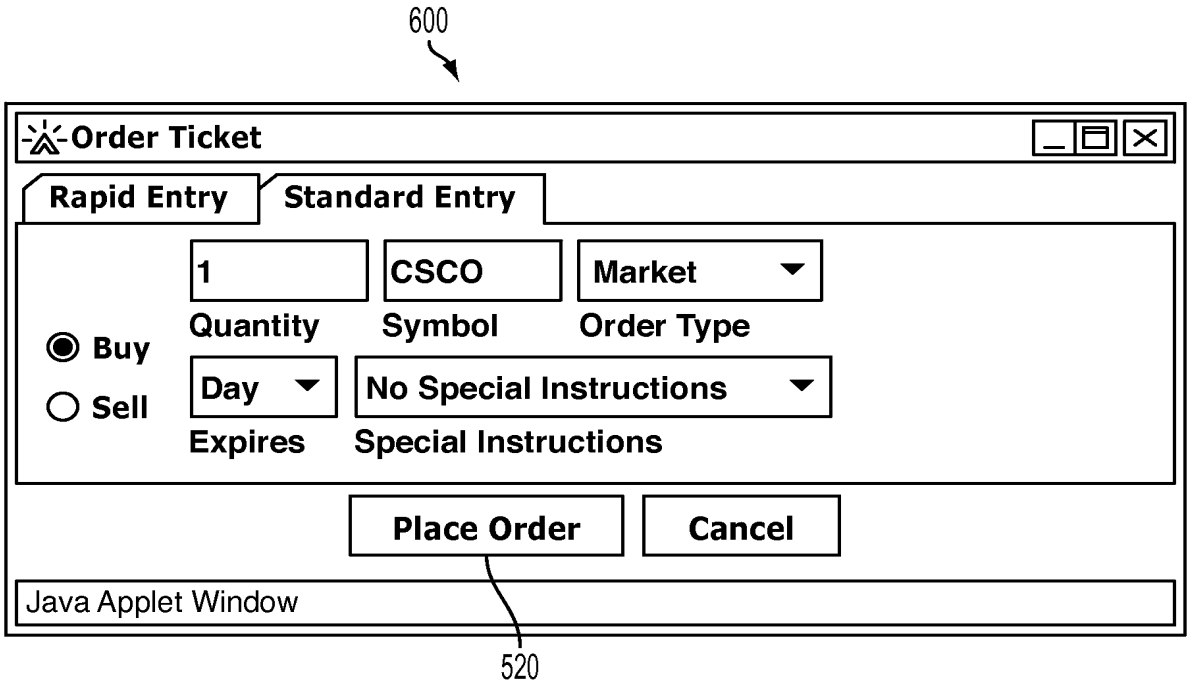
600
Order Ticket
Rapid Entry
Standard Entry
1
CSCO
Market
Quantity
Symbol
Order Type
Buy
Sell
Day
No Special Instructions
Expires
Special Instructions
Place Order
Cancel
Java Applet Window
520

FIG. 6

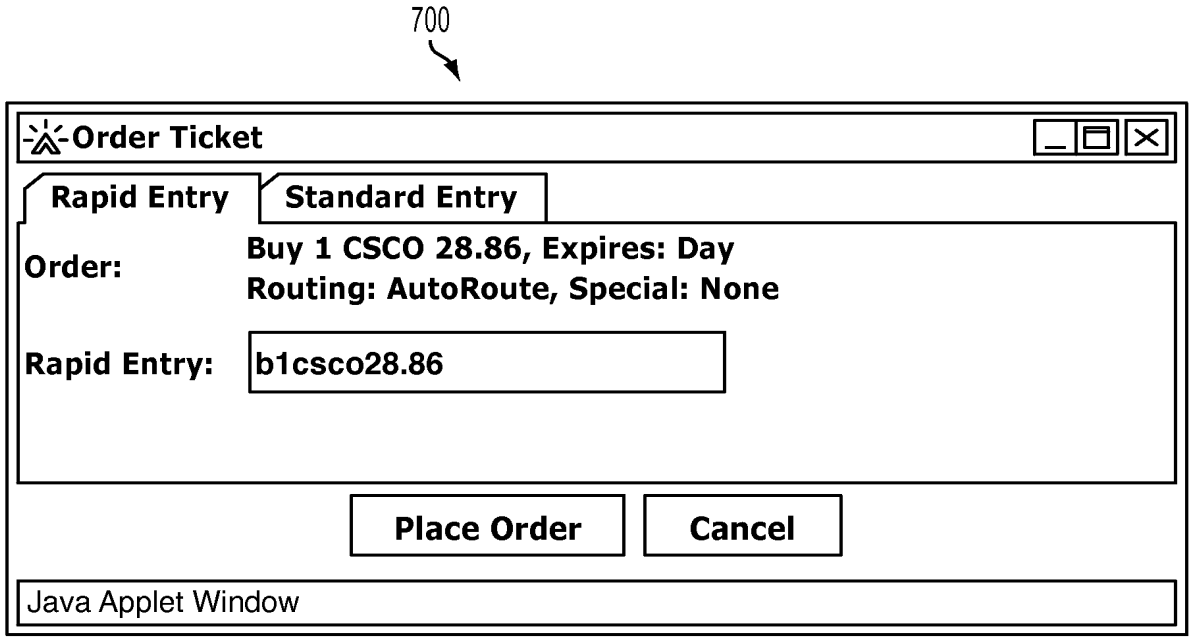
700
Order Ticket
Rapid Entry
Standard Entry
Order:
Buy 1 CSCO 28.86, Expires: Day
Routing: AutoRoute, Special: None
Rapid Entry:
b1csco28.86
Place Order
Cancel
Java Applet Window

FIG. 7

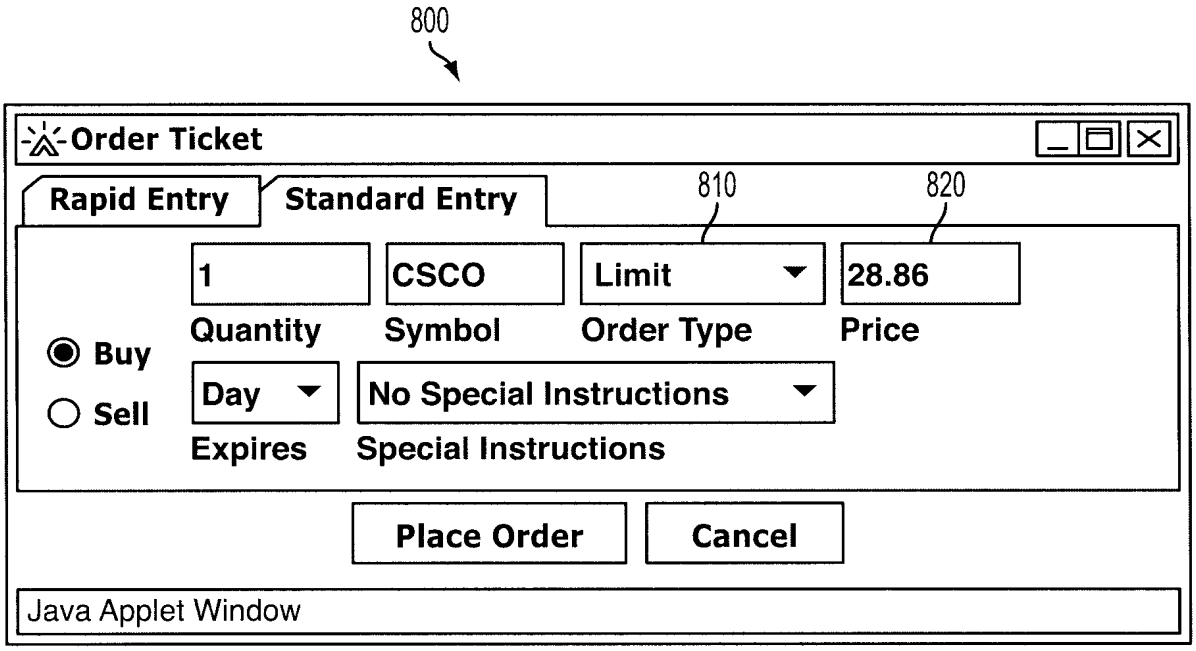
800
Order Ticket
Rapid Entry
Standard Entry
810
820
1
CSCO
Limit
28.86
Quantity
Symbol
Order Type
Price
Buy
Sell
Day
No Special Instructions
Expires
Special Instructions
Place Order
Cancel
Java Applet Window

FIG. 8

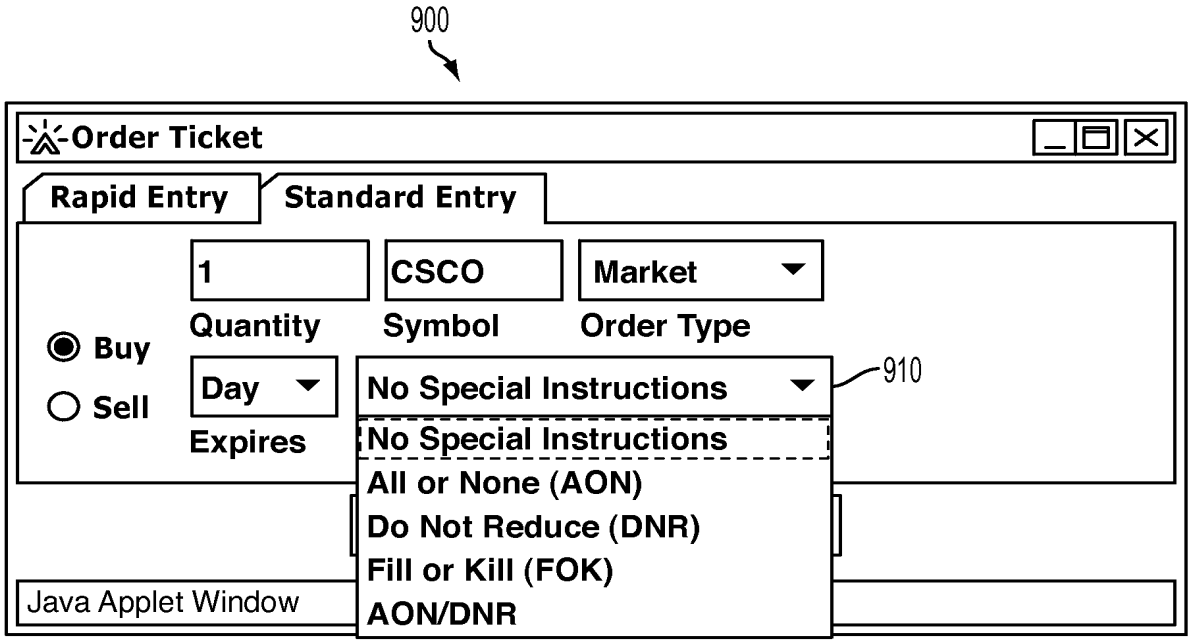
900
Order Ticket
Rapid Entry
Standard Entry
1
Quantity
CSCO
Symbol
Market
Order Type
Buy
Sell
Day
Expires
No Special Instructions
910
No Special Instructions
All or None (AON)
Do Not Reduce (DNR)
Fill or Kill (FOK)
AON/DNR
Java Applet Window

FIG. 9

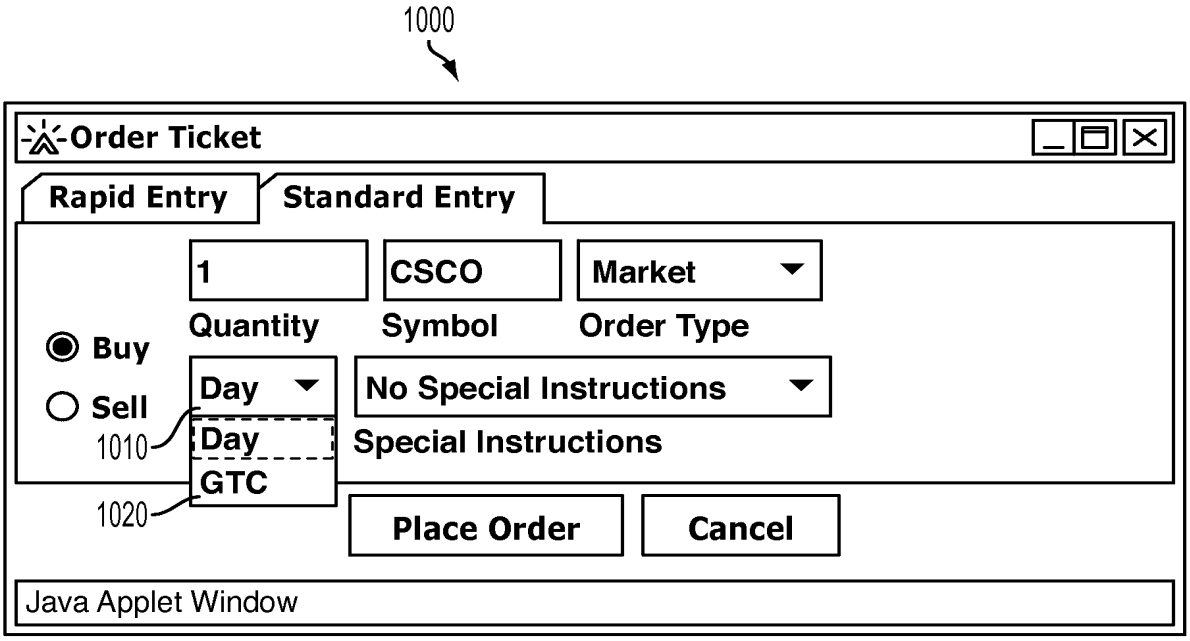
1000
Order Ticket
Rapid Entry
Standard Entry
1
CSCO
Market
Quantity
Symbol
Order Type
Buy
Sell
Day
No Special Instructions
Day
GTC
Special Instructions
1010
1020
Place Order
Cancel
Java Applet Window

FIG. 10

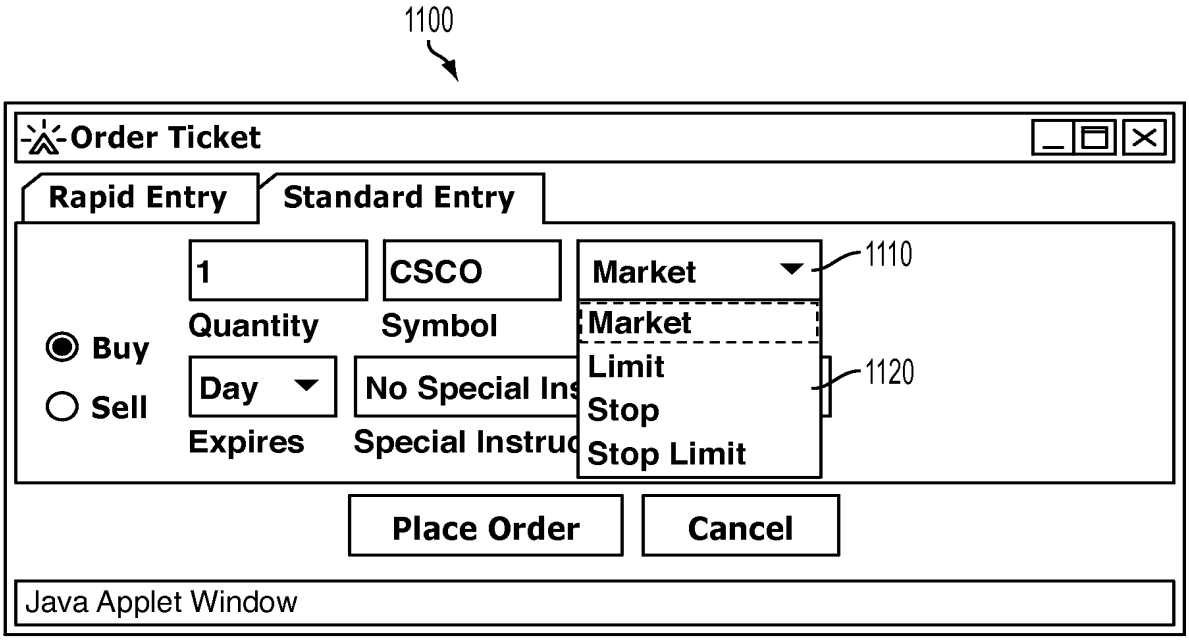
1100
Order Ticket
Rapid Entry
Standard Entry
1
CSCO
Market
1110
Quantity
Symbol
Market
Limit
Stop
Stop Limit
1120
Buy
Sell
Day
No Special Ins
Expires
Special Instruc
Place Order
Cancel
Java Applet Window

FIG. 11

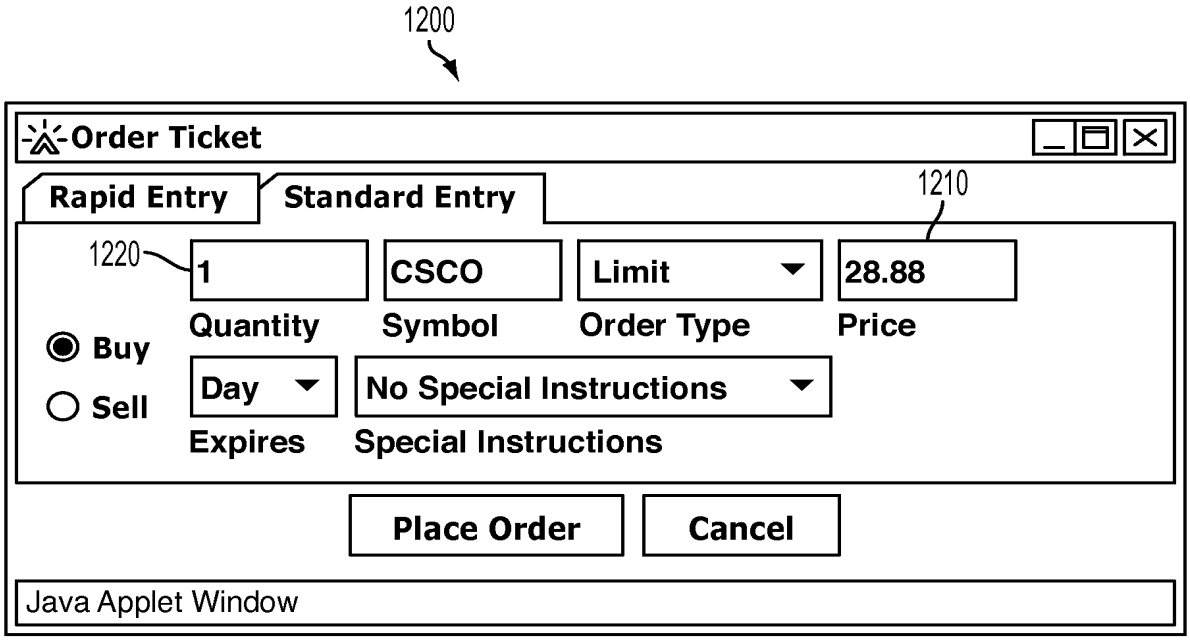
1200
Order Ticket
Rapid Entry
Standard Entry
1210
1220
1
CSCO
Limit
28.88
Quantity
Symbol
Order Type
Price
Buy
Sell
Day
No Special Instructions
Expires
Special Instructions
Place Order
Cancel
Java Applet Window

FIG. 12

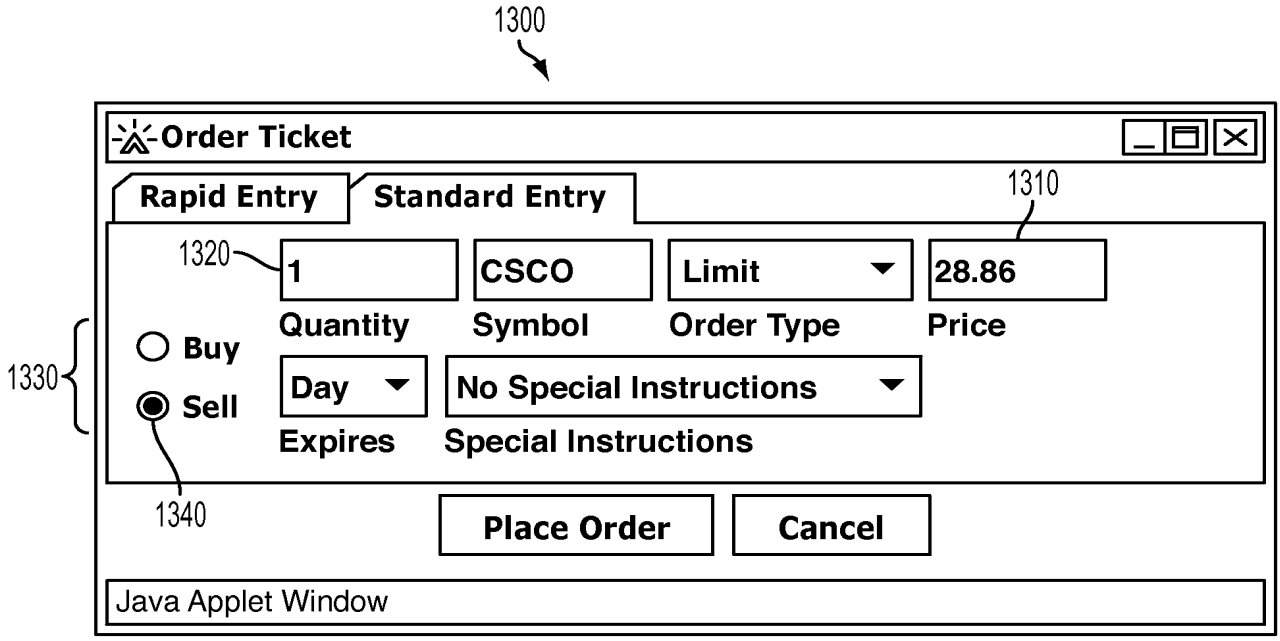
1300
Order Ticket
Rapid Entry
Standard Entry
1310
1320
1
CSCO
Limit
28.86
Quantity
Symbol
Order Type
Price
1330
Buy
Sell
Day
No Special Instructions
Expires
Special Instructions
1340
Place Order
Cancel
Java Applet Window

FIG. 13

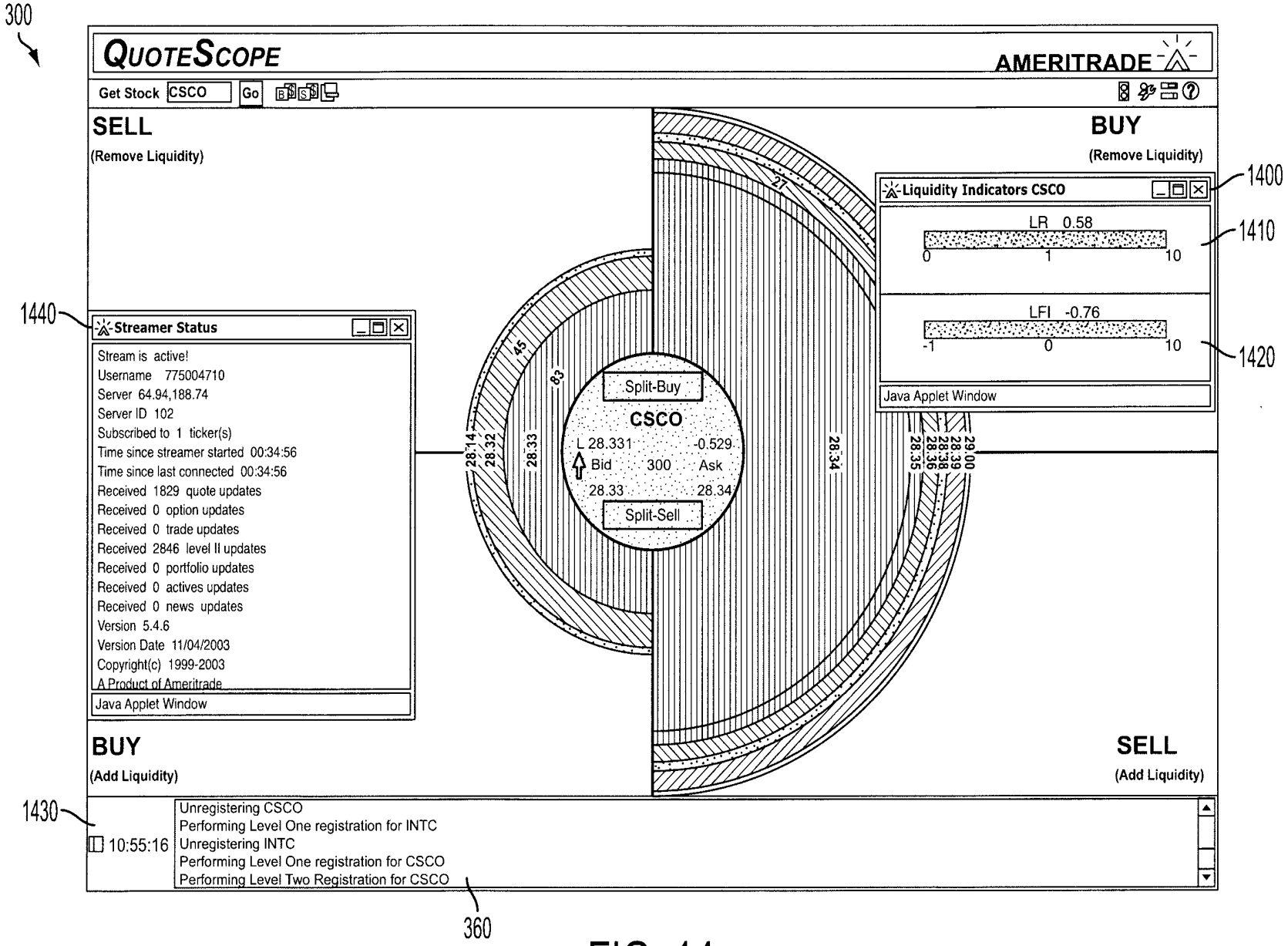
300
QUOTESCOPE
AMERITRADE
Get Stock CSCO Go
SELL
(Remove Liquidity)
BUY
(Remove Liquidity)
1400
Liquidity Indicators CSCO
LR 0.58
0 1 10
1410
LFI -0.76
-1 0 10
1420
Java Applet Window
1440
Streamer Status
Stream is active!
Username 775004710
Server 64.94,188.74
Server ID 102
Subscribed to 1 ticker(s)
Time since streamer started 00:34:56
Time since last connected 00:34:56
Received 1829 quote updates
Received 0 option updates
Received 0 trade updates
Received 2846 level II updates
Received 0 portfolio updates
Received 0 actives updates
Received 0 news updates
Version 5.4.6
Version Date 11/04/2003
Copyright(c) 1999-2003
A Product of Ameritrade
Java Applet Window
Split-Buy
CSCO
L 28.331 -0.529
Bid 300 Ask
28.33 28.34
Split-Sell
28.14
28.32
28.33
28.34
28.35
28.36
28.38
28.39
29.00
45
63
21
BUY
(Add Liquidity)
SELL
(Add Liquidity)
1430
10:55:16
Unregistering CSCO
Performing Level One registration for INTC
Unregistering INTC
Performing Level One registration for CSCO
Performing Level Two Registration for CSCO
360

FIG. 14

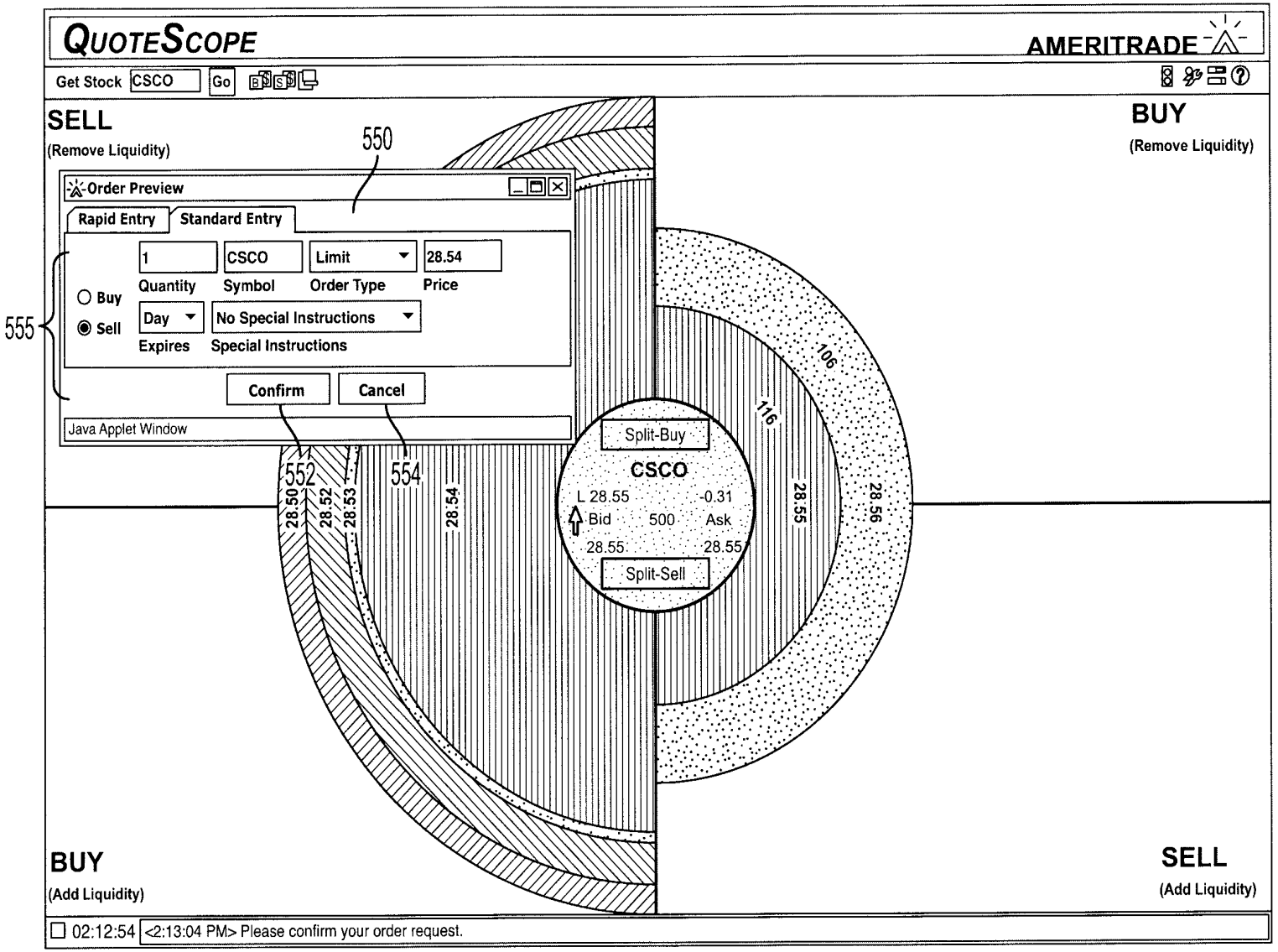
QUOTESCOPE
AMERITRADE
Get Stock CSCO Go
SELL
(Remove Liquidity)
BUY
(Remove Liquidity)
550
Order Preview
Rapid Entry
Standard Entry
1
CSCO
Limit
28.54
Quantity
Symbol
Order Type
Price
Buy
Sell
Day
No Special Instructions
Expires
Special Instructions
555
Confirm
Cancel
Java Applet Window
552
554
28.50
28.52
28.53
28.54
Split-Buy
CSCO
L 28.55
-0.31
Bid
500
Ask
28.55
28.55
Split-Sell
106
116
28.55
28.56
BUY
(Add Liquidity)
SELL
(Add Liquidity)
02:12:54
<2:13:04 PM> Please confirm your order request.

FIG. 15

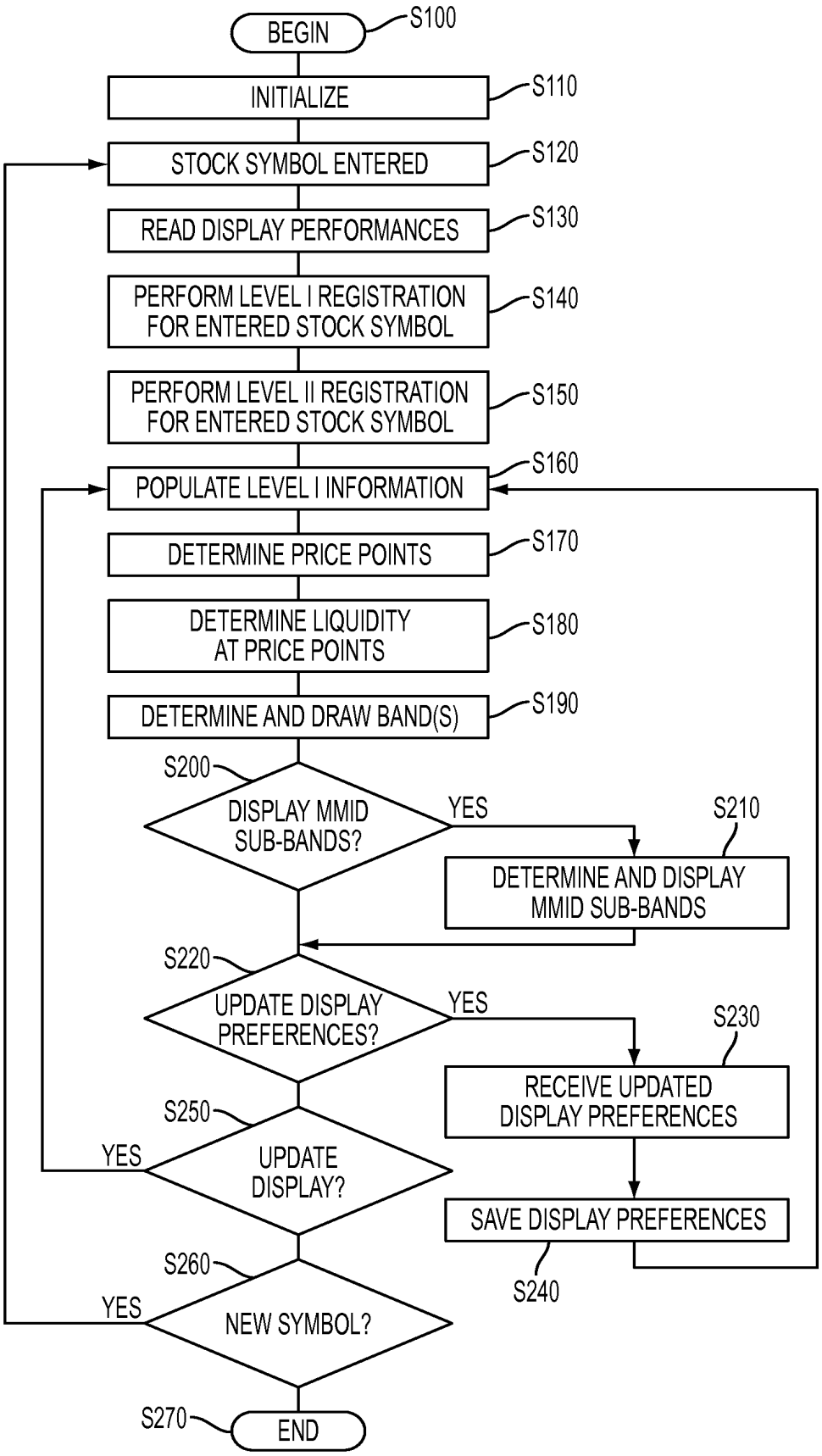
BEGIN
S100
INITIALIZE
S110
STOCK SYMBOL ENTERED
S120
READ DISPLAY PERFORMANCES
S130
PERFORM LEVEL I REGISTRATION FOR ENTERED STOCK SYMBOL
S140
PERFORM LEVEL II REGISTRATION FOR ENTERED STOCK SYMBOL
S150
POPULATE LEVEL I INFORMATION
S160
DETERMINE PRICE POINTS
S170
DETERMINE LIQUIDITY AT PRICE POINTS
S180
DETERMINE AND DRAW BAND(S)
S190
S200
DISPLAY MMID SUB-BANDS?
YES
S210
DETERMINE AND DISPLAY MMID SUB-BANDS
S220
UPDATE DISPLAY PREFERENCES?
YES
S230
RECEIVE UPDATED DISPLAY PREFERENCES
SAVE DISPLAY PREFERENCES
S240
S250
UPDATE DISPLAY?
YES
S260
NEW SYMBOL?
YES
S270
END

FIG. 16

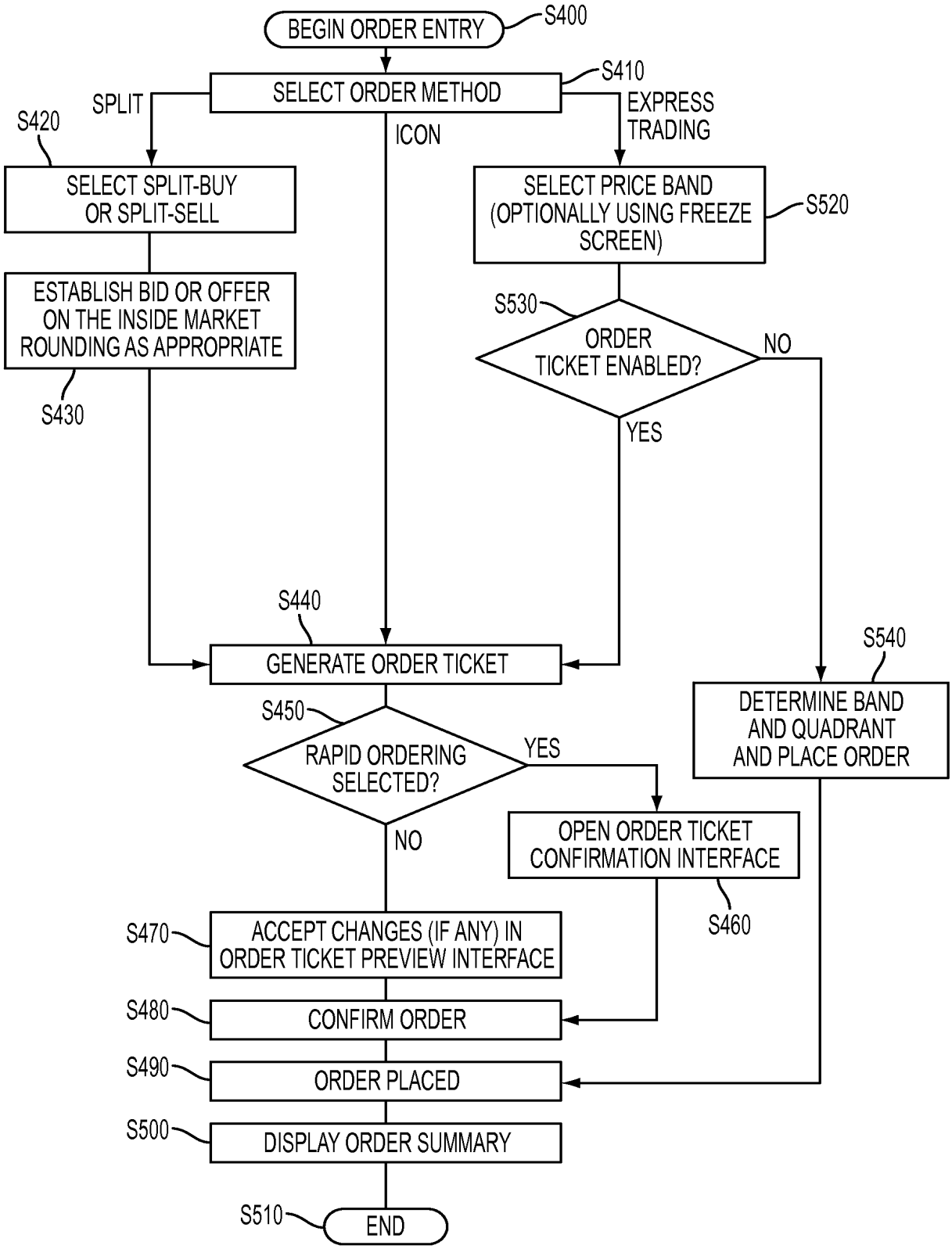
BEGIN ORDER ENTRY
S400
SELECT ORDER METHOD
S410
SPLIT
ICON
EXPRESS TRADING
S420
SELECT SPLIT-BUY OR SPLIT-SELL
ESTABLISH BID OR OFFER ON THE INSIDE MARKET ROUNDING AS APPROPRIATE
S430
SELECT PRICE BAND (OPTIONALLY USING FREEZE SCREEN)
S520
S530
ORDER TICKET ENABLED?
NO
YES
S440
GENERATE ORDER TICKET
S540
DETERMINE BAND AND QUADRANT AND PLACE ORDER
S450
RAPID ORDERING SELECTED?
YES
NO
OPEN ORDER TICKET CONFIRMATION INTERFACE
S460
S470
ACCEPT CHANGES (IF ANY) IN ORDER TICKET PREVIEW INTERFACE
S480
CONFIRM ORDER
S490
ORDER PLACED
S500
DISPLAY ORDER SUMMARY
S510
END

FIG. 17